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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,483	06/21/2000	TOSHIKAZU KOBAYASHI	AD-6547-A	3461

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E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
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WILMINGTON, DE 19805

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 03/27/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/582,483

Applicant(s)

KOBAYASHI, TOSHIKAZU

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,10-15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 12/23/02.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3-5, 7, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. (U.S. 5,886,098) in view of Mukohyama (U.S. 5,700,857).

The disclosure is adequately set forth in paragraph 5 of the office mailed 6/21/02, Paper No. 11, and is incorporated here by reference.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. in view of Mukohyama as applied to claims 1, 3-5, 7, and 11-15 above, and further in view of JP 01163252.

The disclosure is adequately set forth in paragraph 6 of the office mailed 6/21/02, Paper No. 11, and is incorporated here by reference

5. Claims 8, 10, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. (U.S. 5,886,098) in view of Mukohyama (U.S. 5,700,857).

The disclosure is adequately set forth in paragraph 7 of the office mailed 6/21/02, Paper No. 11, and is incorporated here by reference.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. in view of Mukohyama as applied to claims 8, 10, and 17-19 above, and further in view of JP 01163252.

The disclosure is adequately set forth in paragraph 8 of the office mailed 6/21/02, Paper No. 11, and is incorporated here by reference.

Response to Arguments

7. Applicant's arguments and 1.32 declaration filed 12/23/02 have been fully considered but they are not persuasive.

Specifically, applicant argues that there is no motivation to combine Ueda et al. with Mukohyama given that the copolyetherester containing 1-10% polyether segments is not an ion conductive polymer and thus, the composition of Mukohyama is not conductive as defined by the present claims. In order to support their position, applicants have submitted 1.132 declaration that shows that the type of composition known under the tradename Rynite SST35 NC010 is not electrically conductive as presently claimed.

Applicant argues that the copolyetherester is not an ion conducting polymer given that the polymer does not contain proper amount of polyether segments. Applicants note that in order for a polymer to be ion conducting, a certain minimum amount of polyether must be present in the copolymer. As evidence to support this position, applicant points to page 110, right hand

column, of the article "*Ion Transport in Solvent-Free Polymers*" (Ratner et al.). However, it is not clear where on page 110, it is disclosed that a certain amount of polyether must be present in copolymer in order for the copolymer to be ion conductive. Clarification is requested.

With respect to the declaration, it is noted that the declaration does not provide any experimental details only conclusionary statements to support applicant's position that Rynite SST35 NC010 has surface resistivity different than set forth on the material safety data sheet (MSDS) and thus, the declaration is not given any probative value. Further, it is noted that even if the declaration provided such experimental details, the declaration would not be sufficient to overcome the rejections of record for the following reasons.

Applicant states that an example of the type of composition described in Mukohyama is Rynite SST35 NC010, which contains polyethylene terephthalate, polyethylene terephthalate containing copolymerized polyethylene oxide, source of sodium ions, plasticizer, toughner, and glass fiber. In the declaration filed 12/23/02, applicants state that the surface resistivity of such composition is $3.74 \times 10^{14} \Omega$ and thus, is not electronically conductive.

However, it is the examiner's position that although the composition disclosed by Mukohyama is similar to Rynite SST35 NC010, there are differences that would necessarily effect the conductivity of the composition. Specifically, the composition of Mukohyama utilizes only 30% glass fibers while Rynite SST35 NC010 contains 36% glass fibers and further Rynite SST35 NC010 contains 2.6% source of sodium ions while in Mukohyama the source of ions can be present in an amount of as high as 10%. The use of lower amount of glass fiber as well as the use of a higher amount of ion source would necessarily increase the conductivity of the

composition. Thus, while Rynite SST35 NC010 may have surface resistivity of 3.74×10^{14} , it is not clear that the composition of Mukohyama has such surface resistivity.

Further, although the surface resistivity of Rynite SST35 NC010 as determined by applicants, i.e. $3.74 \times 10^{14} \Omega$, is outside the scope of presently claimed surface resistivity, there is no evidence that this means that the composition is non-conductive, only that the composition has conductivity different than that presently claimed. Additionally, the material safety data sheet discloses that Rynite SST35 NC010 is a stiffened, super tough glass reinforced modified polyethylene terephthalate. There is no disclosure that Rynite SST35 NC010 comprises source of sodium ions and plasticizer as described by applicants. Thus, it is not clear if the surface resistivity disclosed in the MSDS is for polyethylene terephthalate or for composition comprising polyethylene terephthalate, polyethylene terephthalate containing copolymerized polyethylene oxide, source of sodium ions, plasticizer, toughner, and glass fiber

It is also noted that even if the surface resistivity of the composition of Mukohyama is outside the scope of the surface resistivity presently claimed, Mukohyama is not used for its teaching of surface resistivity. The surface resistivity is already disclosed by the primary reference Ueda et al. while Mukohyama is used for its teaching of plasticizer which Mukohyama disclose is necessary to realize the crystallization rate and molding temperature needed for realizing the synergistic effect with such polyether segment (col.3, lines 40-46). In light of the motivation for using specific type of plasticizer disclosed by Mukohyama, it is the examiner's position that the combination of Ueda et al. with Mukohyama is proper.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho

Examiner

Art Unit 1714

CS

March 21, 2003